

**Claims:**

What is claimed is:

- 1 1. A system having first and second processes residing on first and second computers used with backup or restore operations, wherein said first and said second computers are in communication with a data storage system on a network, said system comprising:
  - 4 at least one first communication mechanism residing on both said first and second computers for facilitating communications between said first and second processes over
  - 5 said network;
  - 7 a second communication mechanism residing on both said first and second computers for facilitating communication between said first and second processes through
  - 9 said data storage system; and
- 10 means, within said first and second processes, for allowing said first and second processes to determine whether a call from said first and second processes is for first or
- 11 second communication mechanism.
- 1 2. The system of claim 1, wherein said first and second processes are part of a backup or restore process.

1       3.       The system of claim 2, wherein said at least one first communication mechanism is  
2       a network socket.

1       4.       The system of claim 3, wherein said second communication mechanism is a data  
2       storage system socket, and said data storage system socket allows information to be  
3       transferred from said first process to said second process through said data storage  
4       system.

1       5.       The system of claim 1, wherein said backup and restore operations are capable of  
2       backing up and restoring information from file system or database applications.

1       6.       A method for assisting with backup and restore operations in a computer system,  
2       the method comprising the steps of:

3               (a)       establishing at least one first connection over a network, between first and  
4       second processes residing on different computers; and

5               (b)       establishing, in parallel with establishing said at least one first connection, a  
6       second connection, through a data storage system, between said first and said second  
7       processes.

1       7.       The method of claim 6, wherein step (a) comprises the step of:  
2       creating a pair of communication mechanisms on a designated port.

1 8. The method of claim 7, wherein step (a) further comprises the steps of:  
2 requesting with one member of said communication mechanism pair a connection  
3 to said other member of said communication mechanism pair; and  
4 in response to said connection request, accepting said connection request.

1 9. The method of claim 8, wherein step (a) further comprises the step of:  
2 creating a second pair of communication mechanisms on the designated port,  
3 wherein said second pair of communication mechanisms is used for transferring a  
4 different type of information than would be transferred over said first pair of  
5 communication mechanisms.

1 10. The method of claim 9, wherein step (a) further comprises the steps of:  
2 requesting with one member of said second pair of communication mechanisms, a  
3 connection to said other member of said second pair of communication mechanisms; and  
4 in response to said connection request, accepting said connection request.

1 11. The method of claim 6, wherein step (b) comprises the steps of:  
2 creating a third pair of communication mechanisms on a second designated port.

1 12. The method of claim 11, wherein step (b) further comprises the steps of:  
2 requesting with one member of said third pair of communications mechanisms a  
3 connection to said other member of said second pair of communications mechanisms; and  
4 in response to said connection request, accepting said connection request.

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1       13.    The method of claim 12, wherein step (b) further comprises the steps of:  
2            receiving information about a group of resources in said data storage system;  
3            in response to receiving information about said group of resources, creating a  
4            fourth pair of communication mechanisms on a dynamically allocated port; and  
5            connecting said fourth pair of communication mechanisms to each other through  
6        said data storage system.

1       14.    The method of claim 6, wherein said backup and restore operations are for  
2        backing up and restoring information from a file system application.

1       15.    A method for assisting with backup and restore operations in a computer system,  
2        the method comprising:  
3            establishing a connection, over a network, between a first process and a second  
4        process residing on different computers;  
5            receiving information about a dynamically allocated port over the established  
6        connection;  
7            establishing a second connection over the network, on the dynamically allocated  
8        port, between said first and second processes;  
9            identifying resources on a data storage devices to be used in order to transfer  
10      information through said data storage device; and  
11      establishing a connection between said first and second processes through said  
12     data storage system.

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1       16.    The method of claim 15, wherein said backup and restore applications are used in  
2       conjunction with a database application.